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of the United States of America on the certificate. This designation and delegation to the American Bureau of Shipping shall be in effect until terminated by proper authority and notice of cancellation is published in the FEDERAL REGISTER.

- (b) At the option of the owner or agent of a vessel on an international voyage and on direct application to the American Bureau of Shipping, the Bureau may issue to such vessel a Cargo Ship Safety Construction Certificate, having a period of validity of not more than 60 months after ascertaining that the vessel:
- (1) Has met the applicable requirements of the Convention; and
- (2) Is currently classed by the Bureau and classification requirements have been dealt with to the satisfaction of the Bureau.
- (c) When the Bureau determines that a vessel to which it has issued a Cargo Ship Safety Construction Certificate no longer complies with the Bureau's applicable requirements for classification, the Bureau shall immediately furnish to the Coast Guard all relevant information, which will be used by the Coast Guard to determine whether or not to withdraw, revoke or suspend the Cargo Ship Safety Construction Certificate.

[CGFR 67-83, 33 FR 1118, Jan. 27, 1968, as amended by CGD 77-081, 46 FR 56204, Nov. 16, 1981; CGD 90-008, 55 FR 30665, July 26, 1990; CGD 96-041, 61 FR 50735, Sept. 27, 1996: USCG-2000-7790, 65 FR 58465, Sept. 29, 2000]

PART 190—CONSTRUCTION AND ARRANGEMENT

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AUTHORITY: 46 U.S.C. 2113, 3306; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; Department of Homeland Security Delegation No. 0170.1.

SOURCE: CGFR 67-83, 33 FR 1125, Jan. 27, 1968, unless otherwise noted.

Subpart 190.01—Hull Structure

§ 190.01-1 Application.

- (a) The provisions of this subpart, with the exception of §190.01-90, shall apply to all vessels contracted for on or after March 1, 1968.
- (b) Vessels contracted for prior to March 1, 1968, shall meet the requirements of §190.01-90.

§ 190.01-5 Vessels subject to load line.

(a) For vessels assigned a load line, see Subchapter E (Load Lines) of this chapter for special requirements as to strength, closure of openings, etc.

§ 190.01-10 Structural standards.

(a) In general, compliance with the standards established by the American Bureau of Shipping, see subpart 188.35 of this subchapter, will be considered as satisfactory evidence of the structural efficiency of the vessel. However, in special cases, a detailed analysis of the entire structure or some integral part may be made by the Coast Guard to determine the structural requirements.

§ 190.01-15 Special consideration.

(a) Special consideration will be given to the structural requirements for small vessels or vessels of an unusual design not contemplated by the rules of the American Bureau of Shipping.

§ 190.01-90 Vessels contracted for prior to March 1, 1968.

(a) Existing structure previously approved will be considered satisfactory so long as it is maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to

the same standards as the original construction.

(b) Conversions, major alterations, new installations, and replacements, shall meet the applicable specifications in this subpart for new vessels.

Subpart 190.02—Navigation Bridge Visibility

§ 190.02-1 Navigation bridge visibility.

Each oceanographic research vessel which is 100 meters (328 feet) or more in length and contracted for on or after September 7, 1990, must meet the following requirements:

- (a) The field of vision from the navigation bridge, whether the vessel is in a laden or unladen condition, must be such that:
- (1) From the conning position, the view of the sea surface is not obscured forward of the bow by more than the lesser of two ship lengths or 500 meters (1640 feet) from dead ahead to 10 degrees on either side of the vessel. Within this arc of visibility any blind sector caused by cargo, cargo gear, or other permanent obstruction must not exceed 5 degrees.
- (2) From the conning position, the horizontal field of vision extends over an arc from at least 22.5 degrees abaft the beam on one side of the vessel, through dead ahead, to at least 22.5 degrees abaft the beam on the other side of the vessel. Blind sectors forward of the beam caused by cargo, cargo gear, or other permanent obstruction must not exceed 10 degrees each, nor total more than 20 degrees, including any blind sector within the arc of visibility described in paragraph (a)(1) of this section.
- (3) From each bridge wing, the field of vision extends over an arc from at least 45 degrees on the opposite bow, through dead ahead, to at least dead astern.
- (4) From the main steering position, the field of vision extends over an arc from dead ahead to at least 60 degrees on either side of the vessel.
- (5) From each bridge wing, the respective side of the vessel is visible forward and aft.
- (b) Windows fitted on the navigation bridge must be arranged so that:

- (1) Framing between windows is kept to a minimum and is not installed immediately in front of any work station.
- (2) Front windows are inclined from the vertical plane, top out, at an angle of not less than 10 degrees and not more than 25 degrees.
- (3) The height of the lower edge of the front windows is limited to prevent any obstruction of the forward view previously described in this section.
- (4) The height of the upper edge of the front windows allows a forward view of the horizon at the conning position, for a person with a height of eye of 1.8 meters (71 inches), when the vessel is at a forward pitch angle of 20 degrees.
- (c) Polarized or tinted windows must not be fitted.

[CGD 85-099, 55 FR 32249, Aug. 8, 1990]

Subpart 190.03—Subdivision and Stability

§ 190.03-1 General.

Each vessel must comply with the applicable requirements in Subchapter S of this chapter.

[CGD 79-023, 48 FR 51053, Nov. 4, 1983]

Subpart 190.05—General Fire Protection

§ 190.05-1 Application.

- (a) The provisions of this subpart shall apply to all vessels, except as noted otherwise in this subpart.
- (b) Non-self-propelled vessels of less than 300 gross tons shall not be subject to the provisions of this subpart.

§190.05–3 Fire hazards to be minimized.

(a) The general construction of the vessel shall be such as to minimize fire hazards.

§ 190.05–5 Woodwork insulated from heated surfaces.

(a) Internal combustion engine exhausts, boiler, and galley uptakes, and similar sources of ignition shall be kept clear of and suitably insulated from any woodwork or other combustible matter.

§ 190.05-10 Chemical storeroom and lamp room construction.

(a) Chemical storerooms, lamp, paint, and oil lockers and similar compartments shall be constructed of steel or shall be wholly lined with metal.

§ 190.05-15 Segregation of spaces containing the emergency source of electric power.

(a) When a compartment containing the emergency source of electric power, or vital components thereof, adjoins a space containing either the ship's service generators or machinery necessary for the operation of the ship's service generators, all common bulkheads and/or decks shall be protected by approved "structural insulation" or other approved material. This protection shall be such as to be capable of preventing an excessive temperature rise in the space containing the emergency source of electric power, or vital components thereof, for a period of at least 1 hour in the event of fire in the adjoining space. Bulkheads or decks meeting Class A-60 requirements, as defined by §72.05-10 of Subchapter H (Passenger Vessels) of this chapter, will be considered as meeting the requirements of this paragraph.

§ 190.05-20 Segregation of chemical laboratories and chemical store-rooms.

- (a) The provisions of this section shall apply to all vessels contracted for on or after March 1, 1968.
- (b) Chemical storerooms shall not be located in horizontal proximity to nor below accommodation or safety areas.
- (c) Chemical storerooms shall not be located adjacent to the collision bulkhead, nor boundary divisions of the boilerroom, engineroom, galley, or other high fire hazard area.
- (d) Chemical laboratories shall not be located adjacent to nor immediately below safety areas. Wherever possible they shall be similarly separated from accomodation spaces and high fire hazard areas such as the galley.

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Subpart 190.07—Structural Fire Protection

§ 190.07-1 Application.

- (a) The provisions of this subpart, with the exception of §190.07-90, shall apply to all vessels of 4,000 gross tons and over carrying not more than 150 persons and contracted for on or after March 1, 1968.
- (b) The provisions of this subpart, with the exception of §190.07-90, shall apply to all vessels of 300 gross tons and over, but less than 4,000 gross tons, carrying in excess of 16 persons in the scientific party but not more than 150 persons and contracted for on or after March 1, 1968.
- (c) Vessels contracted for prior to March 1, 1968, shall meet the requirements of §190.07-90.
- (d) Those vessels which carry more than 150 persons shall meet the requirements in §§ 72.05–5 through 72.05–60 of Subchapter H (Passenger Vessels) of this chapter.

§ 190.07-5 Definitions.

(a) Standard fire tests. A standard fire test is one which develops in the test furnace a series of time temperature relationships as follows:

5 minutes—1,000° F. 10 minutes—1,300° F. 30 minutes—1,550° F. 60 minutes—1,700° F.

- (b) A Class divisions. Bulkheads or decks of the A Class shall be composed of steel or equivalent metal construction, suitably stiffened and made intact with the main structure of the vessel; such as shell, structural bulkheads, and decks. They shall be so constructed, that if subjected to the standard fire test, they would be capable of preventing the passage of flame and smoke for 1 hour.
- (c) *B* Class bulkheads. Bulkheads of the *B* Class shall be constructed with approved incombustible materials and made intact from deck to deck and to shell or other boundaries. They shall be so constructed that, if subjected to the standard fire test, they would be capable of preventing the passage of flame for one-half hour.
- (d) C Class divisions. Bulkheads or decks of the C Class shall be con-

structed of approved incombustible materials, but need meet no requirements relative to the passage of flame.

- (e) Steel or other equivalent metal. Where the term steel or other equivalent metal is used in this subpart, it is intended to require a material which, by itself or due to insulation provided, has structural and integrity qualities equivalent to steel at the end of the applicable fire exposure.
- (f) Approved material. Where in this subpart approved materials are required, they refer to materials approved under the applicable subparts of part 164 of Subchapter Q (Specifications) of this chapter, as follows:

Deck coverings	164.006
Structural insulation	164.007
Bulkhead panels	164.008
Incombustible materials	164.009
Interior finish	164.012

[CGFR 67-83, 33 FR 1125, Jan. 27, 1968, as amended by CGD 74-155, 41 FR 17910, Apr. 29, 1976]

§ 190.07-10 Construction.

- (a) The hull, superstructure, structural bulkheads, decks, and deckhouses shall be constructed of steel. Alternately, the Commandant may permit the use of other suitable material in special cases, having in mind the risk of fire.
- (b) The boundary bulkheads of general laboratory areas, chemical storerooms, galleys, paint and lamp lockers and emergency generator rooms shall be of "A" class construction.
- (1) Permanently installed divisional bulkheads between laboratories spaces within a general laboratory area may be of B or C class construction.
- (2) Temporary divisional bulkheads between laboratory spaces within a general laboratory area may be constructed of combustible materials when they are necessary to facilitate a specific scientific mission.
- (c) The boundary bulkheads and decks separating the accommodations and control stations from hold and machinery spaces, galleys, main pantries, laboratories, and storerooms, other than small service lockers, shall be of "A" Class construction.
- (1) The boundary bulkheads and decks separating general laboratory

areas of 500 square feet or less from accommodations and control stations shall be of "A-15" Class construction as defined by §72.05-10 of Subchapter H (Passenger Vessels) of this chapter.

- (2) The boundary bulkheads and decks separating general laboratory areas of over 500 square feet from accommodations and control stations shall be of "A-30" Class construction as defined by §72.05-10 of Subchapter H (Passenger Vessels) of this chapter.
- (d) Within the accommodation and service areas the following conditions shall apply:
- (1) Corridor bulkheads in accommodation spaces shall be of the "A" or "B" Class intact from deck to deck. Stateroom doors in such bulkheads may have a louver in the lower half.
- (2) Elevator, dumbwaiter, stairtower, and other trunks shall be of "A" Class construction.
- (3) Bulkheads not already specified to be of "A" or "B" Class construction may be of "A", "B", or "C" Class construction.
- (4) The integrity of any deck in way of a stairway, shall be maintained by means of "A" or "B" class bulkheads and doors at one level. The integrity of a stairtower shall be maintained by "A" class doors at every level. The door shall be of the self-closing type. Holdback hooks will not be permitted. However, magnetic holdbacks operated from the bridge or other suitable remote control positions are acceptable.
- (5) Interior stairs, including stringers and treads, shall be of steel.
- (6) Except for washrooms and toilet spaces, deck coverings within accommodation spaces shall be of an approved type. However, overlays for leveling or finishing purposes which do not meet the requirements for an approved deck covering may be used in thicknesses not exceeding three-eights of an inch.
- (7) Ceilings, linings, and insulation, including pipe and duct laggings, shall be approved incombustible materials.
- (8) Any sheathing, furring, or holding pieces incidental to the securing of any bulkhead, ceiling, lining, or insulation shall be of approved incombustible materials.
- (9) Bulkheads, linings, and ceiling may have a combustible veneer within

a room not to exceed two twentyeighths of an inch in thickness. However, combustible veneers, trim, decorations, etc., shall not be used in corridors or hidden spaces. This is not intended to preclude the use of an approved interior finish or a reasonable number of coats of paint.

(e) Nitrocellulose or other highly flammable or noxious fume-producing paints or lacquers shall not be used.

(f) The provisions of paragraphs (d) (1) through (9) of this section apply to control spaces on vessels whose initial Application for Inspection is submitted to an Officer in Charge, Marine Inspection on or after June 15, 1987.

[CGFR 67-83, 33 FR 1125, Jan. 27, 1968, as amended by CGD 84-073, 52 FR 18364, May 15, 1987; 52 FR 22751, June 15, 1987]

§ 190.07-90 Vessels contracted for prior to March 1, 1968.

- (a) Existing structure arrangements and materials previously approved will be considered satisfactory so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original construction.
- (b) Conversions, major alterations, new installations, and replacements shall comply with the applicable specifications and requirements in this subpart for new vessels.

Subpart 190.10—Means of Escape

§ 190.10-1 Application.

- (a) The provisions of this subpart, with the exception of §190.10-90, shall apply to all vessels other than non-self-propelled vessels of less than 300 gross tons, contracted for on or after March 1, 1968.
- (b) Vessels contracted for prior to March 1, 1968, shall meet the requirements of $\S 190.10-90$.
- (c) Non-self-propelled vessels of less than 300 gross tons shall not be subject to the provisions of this subpart.

§ 190.10-5 Two means required.

(a) There shall be at least two means of escape from all general areas where the crew or scientific personnel may be quartered or normally employed. At

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least one of these two means of escape shall be independent of watertight doors and hatches, except for quick acting watertight doors giving final access to weather decks.

§ 190.10-10 Location.

(a) The two means of escape shall be as remote as practicable so as to minimize the possibility of one incident blocking both escapes.

§ 190.10-15 Vertical ladders not accepted.

(a) Vertical ladders and deck scuttles shall not in general be considered satisfactory as one of the required means of escape. However, where it is demonstrated that the installation of a stairway would be impracticable, a vertical ladder may be used as the second means of escape.

§ 190.10-20 No means for locking doors.

(a) No means shall be provided for locking door giving access to either of the two required means of escape except that crash doors or locking devices, capable of being easily forced in an emergency, may be employed provided a permanent and conspicuous notice to this effect is attached to both sides of the door. This paragraph shall not apply to outside doors to deckhouses where such doors are locked by key only and such key is under the control of one of the vessel's officers.

§190.10-25 Stairway size.

(a) Stairways shall be of sufficient width having in mind the number of persons having access to such stairs for escape purposes.

(b) All interior stairways, other than those within the machinery spaces, shall have minimum width of 28 inches. The angle of inclination with the horizontal of such stairways shall not exceed 50°.

(c) Special consideration for relief may be given if it is shown to be unreasonable or impracticable to meet the requirements in this section.

§ 190.10-30 Dead end corridors.

(a) Dead end corridors, or the equivalent, more than 40 feet in length shall not be permitted.

§ 190.10-35 Public spaces.

(a) In all cases, public spaces having a deck area of over 300 square feet shall have at least two exits. Where practicable, these exits shall give egress to different corridors, rooms, or spaces to minimize the possibility of one incident blocking both exits.

$\S 190.10-40$ Access to lifeboats.

(a) The stairways, corridors, and doors shall be so arranged as to permit a ready and direct access to the various lifeboat and liferaft embarkation areas.

§ 190.10-45 Weather deck communications.

(a) Vertical communication shall be provided between the various weather decks by means of permanent inclined ladders.

§ 190.10-90 Vessels contracted for prior to March 1, 1968.

(a) Existing arrangements previously approved will be considered satisfactory so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original design: Provided, That in no case will a greater departure from the standards of §§ 190.10-5 through 190.10-45 be permitted than presently exists. Nothing in this paragraph shall be construed as exempting any vessel from having two means of escape from all main compartments where persons on board may be quartered or normally employed.

Subpart 190.15—Ventilation

$\S 190.15-1$ Application.

- (a) The provisions of this subpart, with the exception of §190.15-90, shall apply to all vessels other than non-self-propelled vessels of less than 300 gross tons, contracted for on or after March 1, 1968.
- (b) Vessels contracted for prior to March 1, 1968, shall meet the requirements of §190.15-90.
- (c) Non-self-propelled vessels of less than 300 gross tons shall not be subject to the provisions of this subpart.

§ 190.15-5 Vessels using fuel having a flashpoint of 110 °F. or lower.

(a) Spaces containing machinery which uses, or tanks which contain, fuel having a flashpoint of 110° F. or lower shall have natural supply and mechanical exhaust ventilation as required by this section.

(b) The mechanical exhaust system shall be such as to assure the air changes as noted in Table 190.15–5(b) depending on the size of the space.

TABLE 190.15-5(b)

Size of space, cubic feet		Minute per
Over	Not over	Minute per air change
	500	2
500	1000	3
1000	1500	4
1500		5

(c) Exhaust blower motors, unless of a totally enclosed, explosion-proof type, shall be located outside of the ducts and outside of the compartment required to be ventilated. Exhaust blower motors if mounted in any compartment shall be located as high above the bilge as practicable. Blower blades shall be nonsparking with reference to their housings.

(d) Exhaust blower switches shall be located outside of any space required to be ventilated by this section, and shall be of the type interlocked with the ignition switch so that the blowers are started before the engine ignition is switched on. A red warning sign at the switch shall state that the blowers shall be operated prior to starting the engines for a sufficient time to insure at least one complete change of air in the compartments.

(e) The area of the ducts shall be such as to limit the air velocity to a maximum of 2,000 feet per minute. Ducts may be of any shape: *Provided*, That in no case shall one cross section dimension exceed twice the other.

(f) At least two inlet ducts shall be located at one end of the compartment and they shall extend to the lowest part of the compartment or bilge on each side. Similar exhaust ducts shall be led to the mechanical exhaust system from the lowest part of the compartment or bilge on each side of the compartment at the end opposite from

that at which the inlet ducts are fitted. These ducts shall be so installed that ordinary collection of water in the bilge will not close off the ducts.

(g) All ducts shall be of steel construction and reasonably gastight from end to end. The ducts shall lead as direct as possible and be properly fastened and supported.

(h) All supply ducts shall be provided with cowls or scoops having a free area not less than twice the required duct area. When the cowls or scoops are screened, the mouth area shall be increased to compensate for the area of the screen wire. Dampers shall not be fitted in the supply ducts. Cowls or scoops shall be kept open at all times except when the stress of weather is such as to endanger the vessel if the openings are not temporarily closed. Supply and exhaust openings shall not be located where the natural flow of air is unduly obstructed, or adjacent to possible sources of vapor ignition, nor shall they be so located that exhaust air may be taken into the supply vents.

(i) Provision shall be made for closing all cowls or scoops when the fixed carbon dioxide system is operated.

§ 190.15-10 Ventilation for closed spaces.

(a) All enclosed spaces within the vessel shall be properly vented or ventilated. Means shall be provided to close off all vents and ventilators.

(b) Means shall be provided for stopping all fans in ventilation systems serving the chemical laboratories, scientific laboratories, chemical storerooms, and machinery spaces and for closing all doorways, ventilators, and annular spaces around funnels and other openings to such spaces, from outside these spaces, in case of fire.

(c) See §§194.15-5 and 194.20-5 of this subchapter for ventilation of chemical laboratories, scientific laboratories, and storerooms.

§ 190.15-15 Ventilation for living spaces and quarters.

(a) All living spaces shall be adequately ventilated in a manner suitable to the purpose of the space.

(b) All spaces used as quarters for crewmembers and scientific personnel shall be ventilated by a mechanical

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system unless it can be shown that a natural system will provide adequate ventilation. By a natural system is meant those spaces so located that the windows, ports, skylights, etc., and doors to passageways can be kept open and thereby provide adequate ventilation under all ordinary conditions of weather.

§ 190.15-90 Vessels contracted for prior to March 1, 1968.

(a) Existing arrangements previously approved will be considered satisfactory so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original design: Provided, That in no case will a greater departure from the standards of §§ 190.15-5 through 190.15-15 be permitted than presently exists.

Subpart 190.20—Accomodations for Officers, Crew, and Scientific Personnel

SOURCE: CGD 95-027, 61 FR 26011, May 23, 1996, unless otherwise noted.

§ 190.20-1 Application.

- (a) Except as noted below, the provisions of this subpart apply to all vessels contracted for on or after March 1,
- (b) Vessels contracted for prior to March 1, 1968, must meet the requirements of §190.20-90.

§ 190.20-5 Intent.

- (a) The accommodations provided for officers, crew, and scientific personnel on all vessels must be securely constructed, properly lighted, heated, drained, ventilated, equipped, located, arranged, and, where practicable, shall be insulated from undue noise, heat, and odors.
- (b) Provided the intent of this subpart is met, consideration may be given by the Officer in Charge, Marine Inspection to relax the requirements relating to the size and separation of accommodations for scientific personnel.

§ 190.20-10 Location of crew spaces.

(a) Crew quarters must not be located farther forward in the vessel than a vertical plane located at 5 percent of the vessel's length abaft the forward side of the stem at the designated summer load water line. However, for vessels in other than ocean or coastwise service, this distance need not exceed 8.5 meters (28 feet). For purpose of this paragraph, the vessel's length shall be as defined in §43.15-1 of subchapter E (Load Lines) of this chapter. Unless approved by the Commandant, no section of the deck head of the crew spaces may be below the deepest load line.

(b) There must be no direct communication, except through solid, close fitted doors or hatches between crew spaces and chain lockers, or machinery

spaces.

§ 190.20-15 Construction.

All crew spaces are to be constructed and arranged in a manner suitable to the purpose for which they are intended and so they can be kept in a clean, workable and sanitary condi-

§ 190.20-20 Sleeping accommodations.

- (a) Where practicable, each licensed officer must be provided with a separate stateroom.
- (b) Sleeping accommodations for the crew must be divided into rooms, no one of which must berth more than 4 persons.
- (c) Each room must be of such size that there are at least 2.78 square meters (30 square feet) of deck area and a volume of at least 5.8 cubic meters (210 cubic feet) for each person accommodated. The clear head room must be not less than 190 centimeters (75 inches). In measuring sleeping accommodations any furnishings contained therein for the use of the occupants are not to be deducted from the total volume or from the deck area.
- (d) Each person shall have a separate berth and not more than one berth may be placed above another. The berth must be composed of materials not likely to corrode. The overall size of a berth must not be less than 68 centimeters (27 inches) wide by 190 centimeters (75 inches) long, except by special permission of the Commandant.

Where two tiers of berths are fitted, the bottom of the lower berth must not be less than 30 centimeters (12 inches) above the deck. The berths must not be obstructed by pipes, ventilating ducts, or other installations.

(e) A locker must be provided for each person accommodated in a room.

§ 190.20-25 Washrooms and toilet rooms.

- (a) There must be provided at least 1 toilet, 1 washbasin, and 1 shower or bathtub for each 8 members or portion thereof in the crew to be accommodated who do not occupy rooms to which private or semi-private facilities are attached.
- (b) The toilet rooms and washrooms must be located convenient to the sleeping quarters of the crew to which they are allotted but must not open directly into such quarters except when they are provided as private or semi-private facilities.
- (c) All washbasins, showers, and bathtubs must be equipped with adequate plumbing, including hot and cold running water. All toilets must be installed with adequate plumbing for flushing. Where more than 1 toilet is located in a space or compartment, each toilet must be separated by partitions.

§ 190.20-30 Messrooms.

- (a) Messrooms must be located as near to the galley as is practicable except where the messroom is equipped with a steam table.
- (b) Each messroom must seat the number of persons expected to eat in the messroom at one time.

§ 190.20-35 Hospital space.

- (a) Except as specifically modified by paragraph (f) of this section, each vessel which in the ordinary course of its trade makes voyages of more than 3 days duration between ports and which carries a crew of 12 or more, must be provided with a hospital space. This space must be situated with regard to the comfort of the sick so that they may receive proper attention in all weather.
- (b) The hospital must be suitably separated from other spaces and must be

used for the care of the sick and for no other purpose.

- (c) The hospital must be fitted with berths in the ratio of 1 berth to every 12 members of the crew or portion thereof who are not berthed in single occupancy rooms, but the number of berths need not exceed 6. Where all single occupancy rooms are provided, the requirement for a separate hospital may be withdrawn, provided that 1 stateroom is fitted with a bunk accessible from both sides.
 - (d) [Reserved]
- (e) The hospital must have a toilet, washbasin, and bathtub or shower conveniently situated. Other necessary suitable equipment such as a clothes locker, a table and a seat must be provided.
- (f) On vessels in which the crew is berthed in single occupancy rooms, a hospital space will not be required, provided that 1 room must be designated and fitted with use as a treatment or isolation room. This room must meet the following standards:
- (1) The room must be available for immediate medical use; and
- (2) A washbasin with hot and cold running water must be installed either in or immediately adjacent to the space and other required sanitary facilities must be conveniently located.

§ 190.20-40 Other spaces.

Each vessel shall have-

- (a) Sufficient facilities where the crew may wash and dry their own clothes, including at least 1 sink supplied with hot and cold fresh water;
 - (b) Recreation spaces; and
- (c) A space or spaces of adequate size on the open deck to which the crew has access when off duty.

§ 190.20-45 Lighting.

Each berth must have a light.

§ 190.20-50 Heating and cooling.

- (a) All manned spaces must be adequately heated and cooled in a manner suitable to the purpose of the space.
- (b) Radiators and other heating apparatus must be so placed and shielded, where necessary, to avoid risk of fire, danger or discomfort to the occupants. Pipes leading to radiators or heating apparatus must be insulated where

§ 190.20-55

those pipes create a hazard to persons occupying the space.

§ 190.20-55 Insect screens.

Provisions must be made to protect the crew quarters against the admission of insects.

§ 190.20-90 Vessels contracted for prior to March 1, 1968.

Existing structures, arrangements, materials, and facilities previously approved will be considered satisfactory so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original construction, provided that in no case will a greater departure from the standards of §§ 190.20–5 through 190.20–55 be permitted than presently exists.

Subpart 190.25—Rails and Guards

§ 190.25-1 Application.

- (a) The provisions of this subpart with the exception of §190.25-90, apply to all vessels contracted for on or after July 1, 1969.
- (b) Vessels contracted for prior to July 1, 1969 shall meet the requirements of §190.25-90.

[CGFR 69-72, 34 FR 17503, Oct. 29, 1969]

§ 190.25-5 Where rails required.

(a) All vessels shall have efficient guard rails or bulwarks on decks and bridges. The height of rails or bulwarks shall be at least 391/2 inches from the deck. At exposed peripheries of the freeboard and superstructure decks, the rails shall be in at least three courses, including the top. The opening below the lowest course shall not be more than 9 inches. The courses shall not be more than 15 inches apart. In the case of ships with rounded gunwales the guard rail supports shall be placed in the flat of the deck. On other decks and bridges the rails shall be in at least two courses, including the top, approximately evenly spaced. If it can be shown to the satisfaction of the Officer in Charge, Marine Inspection, that the installation of rails of such height will be unreasonable and

impracticable, having regard to the business of the vessel, rails of a lesser height or in some cases grab rails may be accepted and inboard rails may be eliminated if the deck is not generally accessible.

(b) Where it can be shown to the satisfaction of the Commandant that a vessel is engaged exclusively in voyages of a sheltered nature, the provisions of paragraph (a) of this section may be relaxed.

[CGFR 69-72, 34 FR 17503, Oct. 29, 1969]

§ 190.25-10 Storm rails.

(a) On vessels in ocean and coastwise service, suitable storm rails shall be installed in all passageways and at the deckhouse sides where persons on board might have normal access. Storm rails shall be installed on both sides of passageways which are 6 feet or more in width.

§ 190.25-15 Guards in dangerous places.

(a) Suitable hand covers, guards, or rails shall be installed in way of all exposed and dangerous places such as gears, machinery, etc.

§ 190.25-90 Vessels contracted for prior to July 1, 1969.

(a) Existing structures, arrangements, materials, and facilities previously approved will be considered satisfactory so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original construction: *Provided*, That in no case will a greater departure from the standards of §§ 190.25–5 through 190.25–15 be permitted than presently exists.

[CGFR 67-83, 33 FR 1125, Jan. 27, 1968, as amended by CGFR 69-72, 34 FR 17503, Oct. 29, 1969]

PARTS 191-192 [RESERVED]